

We claim:

1. A method for converting a two-to-one anamorphic film image into a video output signal having multiple video output lines, comprising the steps of:

- 5 (a) scanning the film image in a progressive scan, each scan comprising a scan line, using the non-anamorphic spacing between scan lines,
- (b) storing the scan lines in memory,
- 10 (c) forming a video output line, each one of the video output lines being formed according to the following steps:
 - (1) for the first video output line, combining a first scan line with the two scan lines adjacent to the first scan line,
 - 15 (2) for subsequent video output lines, combining a subsequent scan line differing from the previous scan line by $2n$ scan lines, where n equals 1 for a progressive output or 2 for an interlaced output, with the adjacent scan lines to said subsequent scan line, and
 - 20 (3) repeating the preceding step (c)(2) until the image is formed into the video output signal.

2. The method of claim 1 for converting an
25 anamorphic film image into a video output signal wherein step (c)(1) and (c)(2) ^{the} ~~be~~ combining includes weighting of the scan lines.

3. The method of claim 2 wherein the weighting of the scan lines is substantially equal.

30 4. The method of claim 2 wherein the weighting is unequal.

5. The method of claim 2 wherein the weighting is substantially $1/2$ for the scan line and substantially $1/4$ for each of the two adjacent lines.

6. The method of claim 1 wherein the video output is
5 interlaced.

7. The method of claim 6 wherein a first and second interlaced field are formed.

8. The method of claim 7 wherein the first scan line of the second interlaced field is 2 lines offset from the
10 first ^{scan} ~~scanned~~ line in the first field.

9. A method for scanning film comprising the steps of:

- (a) scanning the film in m-scan lines of a progressive raster scan,
- 15 (b) generating a video output consisting of n active scan lines wherein m is at least twice n, by the following steps:
 - (1) combining a first main scan line with one or more other nearby scan lines to form a first
20 video output line, and
 - (2) forming a next video output line by combining a second main scan line with ^{one or more} yet another nearby scan ^{lines} ~~line~~, where the first main scan line and second main scan line are not
25 adjacent, and
 - (3) repeating the preceding step.

10. The method of claim ⁹ ~~10~~ wherein the said another scan lines are adjacent to said main scan lines.

11. The method of claim 10 wherein the two adjacent
30 lines to a main scan line are combined.

a 12. The method of claim ⁹~~10~~ wherein the combined scan lines are weighted. ^

13. The method of claim 12 wherein the scan lines are unequally weighted.

5 14. The method of claim 12 wherein the scan lines are equally weighted.

15. A system for forming a video output signal from anamorphic film comprising:

- 10 (a) a raster scan generator system for scanning film at a non-anamorphic rate or greater,
- (b) a frame store having an input for receiving a digital image signal, an output for outputting multiple digital video signals, and an input for receiving an address,
- 15 (c) an address generator for selecting nonadjacent scans,
- (d) means for weighting the output from the frame store, and
- 20 (e) summing means for combining the output of the weighing means, the output of the summing means forming the video output signal.

16. The apparatus of claim 15 wherein the frame store is random access memory.

25 17. The apparatus of claim 15 wherein the frame store is DRAM.

18. The apparatus of claim 15 wherein the frame store is VRAM.

30 19. The apparatus of claim 15 further including a telecine for providing the digital image signal to the input of the frame store.

20. The apparatus of claim 15 wherein the frame store comprises three separate frame stores.